NOAA Small Boat Safety Program
Class A Annual Small Boat Evaluation Outline

- Annual Small Boat Evaluations (ASBE) are inspections conducted by Vessel Operations Coordinators (VOC), Commanding Officers (CO), or their designee(s) using the approved ASBE checklists and outlines.
- ASBE checklists have been condensed from detailed ASBE outlines for ease of use in the field. Evaluators shall use the checklists during the inspection, and shall refer to the outlines for additional detail as needed. Evaluators are responsible for all information contained within the ASBE outlines.
- ASBEs are required annually.
- The ASBE outlines and checklists are based on NAO 217-103, 46 CFR, 33 CFR, NFPA 302, MARPOL, ABYC standards and recommendations, USCG inspection criteria, and standard marine survey practices.
- Some items may not apply to all boats. Evaluators are responsible for determining applicable items. Consult NAO 217-103 for equipment carriage requirements. Installed equipment in excess of requirements must be maintained to inspection standards.
- Completed evaluation checklists, reports, and records of findings and recommendations shall be signed by the evaluator, and signed and retained by the VOC with a copy forwarded to and signed by the LOSBO. Notification of the evaluation will be reported to the NOAA Small Boat Safety Program Coordinator (SBSPC). Reports shall be generated when numerous or significant deficiencies are noted. Reports are then forwarded to the NMAO Fleet Inspection Office via the SBSPC.
- The NOAA Fleet Inspection office (757-441-6766) and Small Boat Engineer (757-441-6202, sbp.engineer@noaa.gov) are available for additional guidance.

I. Required Documentation
- A. Records of previous inspections.
- B. Stability log.
  - 1. Lists maximum capacity of the boat and the weight of typical equipment used for each mission.
  - 2. Record of equipment installations and associated stability impacts.
- C. Risk assessment.
- D. Operator's manual.
- E. Records of annual fire extinguisher servicing.

II. Stability
- A. Capacity plate is mounted at the transom or operating station.
  - 1. Capacity plate must list maximum capacity of the boat in pounds (includes cargo, engines, fuel, gear, and personnel). If not provided by

manufacturer, consult 33 CFR 183 Subpart C for maximum capacity determination guidelines.

B. Combined weight of engine(s), fuel, installed equipment, cargo, gear, and personnel must not exceed maximum capacity.

II. Life Saving and Emergency Equipment

A. Life preservers (PFDs)

1. Refer to the NOAA PFD Policy for carriage requirements.
2. Check straps, snaps, and fabric for signs of wear and deterioration.
3. If CO_2 inflation type, check inflation mechanism and cylinder condition, status indicator, and expiry. Ensure spare cylinder(s) and arming kit are aboard. Bobbins and CO_2 cylinders shall be replaced according to manufacturer's recommendations and Coast Guard requirements.
4. If KAPOK type, check pliability.
5. Each PFD must be fitted with approved whistle and PFD lights. If chemical type, check expiry. If battery type, check battery expiry, lens, and seal.
6. Each PFD must have at least 31 square inches of retro-reflective material on front and back (when inflated for CO_2 PFDs).

B. Visual distress signals

1. Three night use Coast Guard approved visual distress signals are required when operating between sunset and sunrise. Approved signals consist of:
    a. Red hand held flares
    b. Meteor flares
    c. Parachute flares
    d. Electric distress light (replaces 3 pyrotechnic devices)
2. Pyrotechnics shall be unexpired and stamped with date of manufacture, service life, and expiry.
3. Pyrotechnics should be clean, dry, and in serviceable condition.
4. Pyrotechnics shall be stowed in a portable, watertight container.
5. Pyrotechnics must be USCG approved.

C. First aid and medical

1. Ensure first aid kit is adequate for type of operation and skill level of personnel expected to deliver aid.
2. Contents in good order and not expired.
3. Ensure "First Aid Kit" is stenciled on container.
4. Ensure first aid kit is adequately stowed, visible, and readily available.

D. EPIRB / PEPIRB (required when operating >2 nm from shore or support vessel)

1. Check registration and battery expiry.
2. Conduct operational test.
3. Check hydrostatic release if mounted.
4. Check inspection logs.

E. Cellular or satellite phone (required when operating >2 nm from shore or support vessel)
1. Check battery and conduct operational test.

F. Emergency sound signaling device
1. Ensure that an emergency sound signaling device (console horn, compressed air horn, etc.) is aboard and in good working condition.
2. Sound signaling device should be capable of a 4-6 second blast audible for at least 0.5 nautical miles.

G. Emergency oars or paddles
1. One set in good working condition.

III. Fire Protection

A. Portable fire extinguishers (1 Type B-I required if boat has enclosed compartment)
1. Verify documentation of annual servicing, or check charge gauge and date of expiry.
2. Ensure extinguisher contents are not solidified.
3. Approved type properly secured in appropriate location.
4. Cylinder corrosion free.
5. Discharge hose is flexible with no signs of wear or deterioration.
6. Discharge nozzle is intact.
7. Hydro test date is current: within 5 yrs for CO_2, 12 yrs for dry chemical.

IV. Navigation and Electronic Equipment

A. Magnetic Compass (not required, but recommended)
1. In good operating condition.

B. Depth Sounder (not required, but recommended)
1. In good operating condition.

C. VHF Radio (1 required for operations up to 2 nm from shore or support vessel, two required for operations > 2 nm from shore or support vessel)
1. If installed on boat and purchased after 21 January 2003, VHF radio must be DSC capable.
a. DSC capable radios must have assigned MMSI.
2. Radio can receive NOAA NWS SAME weather reports
3. Capable of transmitting and receiving VHF FM Channels 13, 16, 22A.
4. Conduct radio checks.
5. VHF must be supplied by or contain batteries with three hour capacity.

D. Navigation Lights
1. Verify that navigation lights are operable and installed in accordance with current edition of USCG Navigation Rules.
2. Lights must be supplied by batteries with at least three hour capacity.

E. Electronic Positioning Equipment (GPS or LORAN required when operating outside protected bays, sounds, or rivers, see NAO 217-103)
1. Conduct operational test.
2. Check accuracy by comparing fix on the device to a charted location.

V. Ground Tackle

A. Anchor (optional, see NAO 217-103)

1. Inspect anchor and rode for damage and corrosion.
2. Adequate for boat and operating area.

B. Bits, chocks, cleats, fairleads, etc.

1. Bits, chocks, cleats, fairleads, etc. are not excessively corroded or grooved.
2. Cleat/bit horns are not missing, broken, or excessively grooved.
3. Foundations are intact and sufficient.

VI. Hull, Deck, Fittings, and Watertight Integrity

A. Water expulsion

1. Ensure self-bailers, scuppers, or free ports allow rapid clearing of water.
2. Ensure they are free of debris.
3. No modifications reduce required freeing port area.

B. Interior structure

1. Visually inspect interior hull. Pay close attention to water line and bilge.
2. Visually examine accessible welds.

C. Deck fittings and equipment

1. Deck structures (storage boxes, etc.,) in good condition.
2. Deck machinery (winches, J-poles, other weight handling gear, net reels, etc.) properly mounted and in good operating condition.
3. J-poles, winches, and other weight handling gear must be marked with safe working load (SWL) and a current weight test plate shall be mounted nearby.

D. Metal hulls

1. Examine hull for wastage, pitting, and fractured weld seams.
2. Examine framing and stiffeners for fractured welds and separation from hull.
3. Note deformation and fractures.

E. RHIB sponsons

1. Examine tube material for damage (deep scratches, gouges, punctures, etc.)
2. Examine patches (mechanical, adhesive) and other repairs for integrity.
3. Inflate tubes to manufacturer's recommended PSI and check for pressure loss after adequate interval (several hours, length of typical work day, etc.).
4. Examine valve condition, operability, and integrity.

F. Fiberglass hulls

1. Examine fasteners for loose fit or wasted material.
2. Examine fiberglass for delamination due to impact or water intrusion.
3. Note fractures at corners and around fasteners and machinery mounts.
4. Note extent of blistering and moisture content.

VII. Outboard Engines

A. Inspect general engine condition, note damage, excessive oil, dirt, and corrosion.

B. Inspect all belts and filters. Filters should be replaced according to manufacturer's guidelines, or more frequently if needed, but at least annually. Filters should be marked with date of installation.
C. Check engine oil levels and condition.
D. Inspect propeller and lower unit for damage.
E. Engine horsepower must not exceed maximum on capacity plate.
F. Conduct successful operational test of propulsion system in forward and reverse gears across full operating range. All engine controls, gauges, indicators, and alarms operate normally. Throttle control has noticeable detent when shifted into neutral.

VIII. Fuel System
- A. Portable tanks
  - 1. Examine condition of fuel tanks, piping, fittings, hoses and support braces.
  - 2. All flexible nonmetallic hoses are of suitable type and double clamped.
  - 3. Ensure method of determining the amount of fuel in each tank is appropriate.
  - 4. Examine all vents and valves for obstructions and ensure proper operation
  - 5. Check non-engine fuel filters. Filters should be replaced according to manufacturer's guidelines, or more frequently if needed, but at least annually. Filters should be marked with date of installation.
- B. Integral tanks
  - 1. Examine condition of fuel tanks, piping, fittings, hoses and support braces.
  - 2. Ensure all fuel tanks and fill pipes are electrically bonded to a common ground.
  - 3. Ensure method of determining the amount of fuel in each tank is appropriate.
  - 4. Examine all vents and valves for obstructions and ensure proper operation
  - 5. Check non-engine fuel filters. Filters should be replaced according to manufacturer's guidelines, or more frequently if needed, but at least annually. Filters should be marked with date of installation.

IX. Auxiliary Equipment and Systems
- A. Steering system (console boats)
  - 1. Verify all foundations and all equipment mounting bolts are intact and secured properly.
  - 2. Inspect control linkages, linkage pins, and ram guides for wear.
  - 3. Examine feedback devices, differential units, or other components that may cause single point failure and make sure they are in good condition.
  - 4. Ensure that all vital connections, pins, couplings and control linkages have securing devices, such as cotter pins or double-nut locking arrangements, to prevent loosening from heavy vibration.

X. Electrical System

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A. Wiring

1. Examine all cables and wires for signs of mechanical damage, jury rigs, dead end cables, splices, excess heat (melting, discoloration, charring, etc.), etc.
2. Examine cable and wire supports for corrosion or deterioration; supports should not cause chafing or other damage to the cable or wire.
3. Ensure portable cables and wires are used in appropriate situations and are not used in permanent applications.
4. Examine shore power connection and cable for mechanical damage, evidence of excess heat (melting, discoloration, charring, etc.) and corrosion.

B. Distribution equipment

1. A general overview of physical condition should be given to all switchboards, junction boxes, inverters, and panels. Examine source selector switches, breakers, and fuses. Ensure proper labeling.
2. All ground detection lights should be in working order and no grounds should be indicated.
3. Over current devices should be clearly and accurately identified.
4. Ensure each distribution point is adequately ventilated and protected from dripping or splashing water.
5. All instrumentation (meters) should be in good working order and calibrated.
6. All controls and meters should be clearly and accurately identified.

C. DC system and batteries

1. Inspect battery condition, note physical damage, corrosion, etc.
2. Verify connections to battery terminals are secure, covered, and of the permanent type.
3. Examine battery trays to ensure serviceability. Verify lining or construction is of a material that is resistant to damage by electrolyte.
4. Test the ammeter connected in the charging circuit.
5. Verify ventilation is sufficient to dissipate the gases generated during charging.
6. Examine charging system, inverters, and all other system components.

XI. Markings

A. Boat has required markings in accordance with NAO 217-103.